

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------|------------------|
| 10/781,862   | 02/20/2004     | Kazuhiro Fujimaki    | Q80021 4469         |                  |
| 7  | 590 04/19/2005 |                      | EXAMINER            |                  |
| SUGHRUE MION, PLLC                                     |                |                      | LEE, SIN J          |                  |
| 2100 Pennsylvania Avenue, NW Washington, DC 20037-3213 |                |                      | ART UNIT            | PAPER NUMBER     |
|  |                |                      | 1752                |                  |

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.                    | Applicant(s)                      |  |  |  |
|---|------------------------------------|-----------------------------------|--|--|--|
| Office Action Summary   | 10/781,862                         | FUJIMAKI, KAZUHIRO                |  |  |  |
| Office Action Guilliary   | Examiner                           | Art Unit                          |  |  |  |
| The MAILING DATE of this communication app  | Sin J. Lee                         | 1752                              |  |  |  |
| Period for Reply  | ears on the cover sheet with the c | orrespondence address             |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                    |                                   |  |  |  |
| Status  |                                    |                                   |  |  |  |
| 1) Responsive to communication(s) filed on 20 Fe  | bruary 2004.                       | ,                                 |  |  |  |
|   |                                    |                                   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                                    |                                   |  |  |  |
| Disposition of Claims   |                                    |                                   |  |  |  |
| 4)  |                                    |                                   |  |  |  |
| Application Papers  |                                    |                                   |  |  |  |
| 9) The specification is objected to by the Examiner.  |                                    |                                   |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |                                    |                                   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                                    |                                   |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |                                    |                                   |  |  |  |
| Priority under 35 U.S.C. § 119  |                                    |                                   |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |                                    |                                   |  |  |  |
| Attachment(s)   |                                    |                                   |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  |                                    |                                   |  |  |  |
| <ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>7-28-04</u>.</li> </ol>  |                                    | te<br>atent Application (PTO-152) |  |  |  |
| S. Patent and Trademark Office  | <del></del>                        |                                   |  |  |  |

AL

Application/Control Number: 10/781,862 Page 2

Art Unit: 1752

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

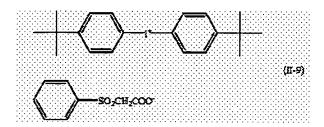
A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2, 4, 5, 7, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimada et al (US 2002/0025489 A1).

Shimada teaches (see [0008]) a heat-sensitive composition which includes (i) a compound generating acid/radical of the general formula (A) to (E), which structures are shown in [0008], and (ii) a compound whose physical and chemical properties are changed irreversibly by an acid or radical. Shimada teaches ([0025]) that in the case of compound such as the one of formula (B), though the reaction mechanism is not definite, it is supposed that by action of heat generated in decomposition of an acid/radical generating agent, a carboxylic acid in a counter anion causes decarboxylation, and an acid or radical is generated not only from a mother nucleus of a sulfonium salt but also from the counter anion side, leading to high sensitivity.

Specifically in Example 3 (see Table 1 in [0258], and [0265]-[0266]), Shimada teaches a heat-sensitive composition comprising: (i) a polymerization initiator (II-9), which structure is shown below

Art Unit: 1752



and which contains a carboxylic acid in the counter anion, as his compound generating acid/radical of the general formula (B); (ii) addition-polymerizable compound (M-2), which is glycerin dimethacrylate hexamethylene diisocyanate urethane prepolymer, as his compound whose physical and chemical properties are changed irreversibly by an acid or radical; and (iii) infrared absorber. Shimada applies his composition onto a substrate to obtain planographic printing plate (see [0256]). Therefore, Shimada teaches present components (A)-(D) of claim 1 and thus teaches present inventions of claims 1 and 14 (there is no requirement in present claim language that present components (A) and (B) have to be two separate compounds).

With respect to present claims 4, 5, and 7, the carboxylic acid in the counter anion of (II-9) shown above teaches present formula (I) and (I-2); present A would be an aromatic group, present X or  $(X^1)$  would be  $-SO_{2^-}$ , present  $R^1$  and  $R^2$  would be H atoms. Thus, the prior art teaches present inventions of claims 2, 4, 5, 7, 11, 12, 13 and 15 (present claim language of claims 11 and 12 does not require present  $X^1$  of claim 7 to contain  $R^3$  group. It only requires that if present  $X^1$  of claim 7 happens to contain the  $R^3$  group, then the  $R^3$  group has to be chosen from those listed in claim 11 or claim 12. Also, present claim language of claim 13 does not require present  $R^1$  and  $R^2$  of claim 7 to be a monovalent substituent. It only requires that if present  $R^1$  and  $R^2$  of claim 7

Art Unit: 1752

happen to be a monovalent substituent, then the R<sup>1</sup> and R<sup>2</sup> group have to be chosen from those listed in present claim 13).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al (US 2002/0025489 A1).

As discussed above in Paragraph 2, in his Example 3, Shimada uses the compound (II-9) (as his polymerization initiator), which has the following carboxylic acid in the counter anion.

Furthermore, Shimada teaches (see the structures (II-9) and (II-32) in [0088]) the equivalence of (II-9) and (II-32), which contains the following counter anion,

Therefore, because the prior art teaches the equivalence of those two compounds (II-9) and (II-32), it would have been obvious to one of ordinary skill in the art to use (II-32) in Shimada's Example 3 (instead of (II-9)) with a reasonable expectation of obtaining a

Application/Control Number: 10/781,862

Art Unit: 1752

negative planographic printing plate which has high sensitivity and has image portions excellent in alkali development-resistance and printing-endurance. The carboxylic acid in the counter anion of (II-32) teaches present  $X^1$  of claims 8-10,  $-N(R^3)$ - in which  $R^3$  is H atom. Thus, the prior art's teaching would render obvious present inventions of claims 8-10.

- 5. Claims 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Shimada does not teach or suggest present compound (A) of claim 3 or 6.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Application/Control Number: 10/781,862

Art Unit: 1752

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

S. J. L. S. Lee

April 15, 2005

Page 6

Sin J. Lee Sin J. Lee Patent Examiner Technology Center